

WHAT IS CLAIMED IS:

1. A method for forming a data storage media, comprising:

injection molding a substrate comprising surface features, wherein said surface features have greater than about 90% of a surface feature replication of an original master; and

disposing a data layer over at least one surface of said substrate;

wherein said data storage media has an axial displacement peak of less than about 500μ under shock or vibration excitation.
2. The method of Claim 1, wherein said substrate comprises a material selected from the group consisting of metal, glass, ceramic, metal-matrix composite, and alloys and combinations comprising at least one of the foregoing materials.
3. The method of Claim 1, wherein said material comprises aluminum.
4. The method of Claim 1, further comprising disposing a core within said substrate.
5. The method of Claim 4, wherein said core further comprises a varied thickness.
6. The method of Claim 4, wherein said core further comprises a cross-sectional geometry selected from the group consisting of concave, convex, tapered, and combinations comprising at least one of the foregoing core geometries.
7. The method of Claim 4, wherein said core further comprises a core outer diameter substantially equal to a substrate outer diameter.
8. The method of Claim 4, wherein said core further comprises a geometry selected from the group consisting of a radial arm, a ring, star-like, and combinations comprising at least one of the foregoing geometries.

9. The method of Claim 4, wherein said core further comprises at least one hollow cavity.

10. The method of Claim 4, wherein said core further comprises at least one filled cavity.

11. The method of Claim 10, wherein said filled cavity comprises a material selected from the group consisting of glass, foams, carbon, metals, ceramics, thermoplastics, thermosets, rubbers, others and composites, alloys, and combinations comprising at least one of the foregoing materials.

12. The method of Claim 4, further comprising performing said core.

13. The method of Claim 1, further comprising reinforcing said substrate with a material selected from the group consisting of glass, foams, carbon, metals, ceramics, thermoplastics, thermosets, rubbers, and composites, alloys, and combinations comprising at least one of the foregoing materials.

14. The method of Claim 1, wherein said data layer has a coercivity of greater than about 1,500 oersted.

15. The method of Claim 14, wherein said coercivity is greater than about 3,000 oersted.